

MEYEROVICH, E.A., doktor tekhn.nauk, prof.; RED'KIN, V.K., inzh. (Moskva)

Partial capacitances (susceptances) of an electrode system and
individual fluxes of the resultant field. Elektrichestvo no.1:54-57
Ja '58.

(Electric engineering)

(MIRA 11:2)

AUTHOR: Meyerovich, E.A., Professor, Doctor of
~~Technical Sciences~~ 105-70 5 9/20

TITLE: The Forming of the Initial Conducting Channel Between the
Electrodes (Obrazovaniye pervonachal'nogo provodyashchego kara.a
mezhdru elektrodami)

PERIODICAL: Elektrichestvo, 1958, Nr 5 pp. 36-41 (USSR)

ABSTRACT: The first paper known to the author and dealing with the applica-
tion of electricity for the purpose of the underground gasification
of coal was published in 1935 (Ref 1). In ENIN the process taking
place in connection with the forming of the initial conducting
coke channel between the electrodes, which were introduced into
the layer of fuel through holes drilled through the surface of the
earth, was investigated. Under the author's supervision such experi-
ments were carried out in ENIN already in 1946; they showed the ex-
istence of a real possibility for the realization of such a proc-
ess, which was later referred to as "Elektrosboyka". In cooperation
with the AS Estonian SSR experiments were continued in the labora-
tory and in the open air with mineral oil slate (Ref 5) Since
1952 ENIN, in cooperation with VNII of underground gasification

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The Forming of the Initial Conducting Channel
Between the Electrodes

105-58-5 9/28

and the Podmoskovnaya Stantsiya for underground gasification of coal has been carrying out work for the preparation of underground industrial gas generators. The distance between boreholes is about 25 m. The physical conceptions characterizing the forming of the initial conducting channel are explained (under perfect conditions - homogeneous, unlimited medium), and the theory of approximation based hereon is given. The medium investigated is a firm fuel in dried state, which is a near approach to a nonconductor. If heated to a temperature at which moisture is eliminated, the specific resistance of the fuel amounts to up to $10^9 - 10^{11}$ Ohm.cm. Measurements show the distinct dependence of the field-breakdown-voltage on the initial temperature of the sample. A general description of the process is given. If a voltage with industrial frequency is applied to the electrodes, moisture is removed, the resistance of the layer of the electrodes increases, and the development of the process stops. If, however, the applied voltage is greater, a continuously developing breakdown occurs. Eventually, a through-going channel is formed between the electrodes by the coke channel. The exact process of the forming of this through-going channel can be computed only by means of a complicated system of nonlinear

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equations. (Non-steady electric- and temperature-field) By the introduction of some simplifications, a "steady" operation of the breakdown is investigated. The propagation of heat is, in this case, expressed by the equation (2). The analysis carried out shows that if, in the space between the electrodes, the process of forming the conducting channel is continued during a certain time, the process will continue also further for any length of time, providing there is no change of any conditions. Thus it is proved that, what was found to be the case in the laboratory, is true also in the case of large distances between the electrodes. An approximate calculation of the "steady" mode of operation in the case of breakdown is given. It is shown to be useful, instead of the velocity v (with which the channel front extends), to choose the parameter $r = \sqrt{\frac{\rho}{b_1} \frac{\theta_m}{\theta_A}}$ - current density, $b_1 = \frac{\theta_m}{\theta_m - \theta_A}$ where ρ denotes the specific resistance, θ_A - temperature at which the fuel begins actually to dry, θ_m - temperature corresponding to the maximum coal-resistance during the process of

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drying. The results of the calculation carried out here show that γ is sufficiently stable in the following cases: In the case of very considerable modifications of thermal conductivity, of specific heat, of the temperature gradient ∇_m , or if, in the case of an increase of the resistance of the deliquescence in the breakdown-front-zone the γ -value does not change by more than double its amount. - The calculation carried out gives results for $v \approx 1$ cm/min, which agrees with values obtained in the laboratory. Finally, it is pointed out that the development of the breakdown may also be the result of the peculiar feature of the characteristics in the dielectric medium. The author's attention was drawn to this theme by Professor A.A. Agroskin. There are 7 figures, 1 table, and 12 references, 9 of which are Soviet.

ASSOCIATION:

Energeticheskiy institut im. Krzhizhanovskogo Akademii nauk SSSR
(Institute for Power Engineering imeni Krzhizhanovskiy AS USSR)

SUBMITTED:

July 21, 1956

AVAILABLE:

Library of Congress

Card 4/4

1. Electricity--Applications
2. Electric igniters--Performance
3. Coal gas--Applications
4. Gas generating systems

AUTHOR: Meyerovich, E. A., Professor, Doctor of ~~Technical Sciences~~ 307, 1 - 8-9-14, 14

TITLE: On the Method of Reduction to Stabilized Operating Conditions (K voprosu o metode privedeniya k ustanoivshemusya rezhimu)

PERIODICAL: Elektrichestvo, 1958, Nr 9, pp 86 - 87 (USSR)

ABSTRACT: On the occasion of a letter by O.V. Mamontov published in Elektrichestvo, 1957, Nr 7, it is again demonstrated that, in spite of Mamontov's statements, the method given by the author shows a good consistency of results obtained by the computing method mentioned in reference 1, and of those obtained by the classical method for computing electric circuits. Editor's note: In his calculations, which were published in Nr 7 of Elektrichestvo, '57, Mamontov has made use of an assumption that was not used with the method proposed by Meyerovich (Izvestiya AS USSR, Section of Engineering Sciences, Nr 10, 1950). This assumption, which might seem suitable from the viewpoint of a simplified calculation, consists of omitting some

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On the Method of Reduction to Stabilized Operating
Conditions

SVV, 196-16-9-24, 34

terms of the development series for the EMP which leads
to the errors mentioned by Mamontov. There are 1 figure
1 table, and 5 references, 5 of which are Soviet.

Card 2/2

MEYEROVICH, B.A., prof., doktor tekhn.nauk; BONDARENKO, S.T., kand.tekhn.nauk; BRODSKAYA, B.Kh., kand.tekhn.nauk; LYANDRES, S.M., kand.tekhn.nauk; PAN'KOVSKIY, V.I.; REZNIKOV, A.D.; ZUBKOV, P.I., kand.tekhn.nauk, red. izd-va; POLYAKOVA, T.V., tekhn.red.

[Applying an electric current directly to the fuel layer in shaftless underground gasification] Primenenie elektricheskogo tepla dlia neposredstvennogo vozdeistviia na plast topliva pri besshakhtnoi podzemnoi gazifikatsii. Moskva, 1959. 234 p.

(MIRA 12:2)

1. Akademiya nauk SSSR.. Energeticheskii institut. 2. Energeticheskii institut im. G.M. Krzhizhanovskogo AN SSSR (for Meyerovich, Bondarenko). 3. Institut khimii AN Estonskoy SSR (for Brodskaya). 4. Glavnyy inzhener Podmoskovnoy stantsii Podzemnoy gazifikatsii ugley (for Pan'kovskiy). 5. Vsesoyuznyy nauchno-issledovatel'skiy i proyektnyy institut podzemnoy gazifikatsii ugley (for Lyandres). 6. Rukovoditel' laboratorii Vsesoyuznogo nauchno-issledovatel'skogo i proyektnogo instituta podzemnoy gazifikatsii ugley (for Reznikov).

(Coal gasification, Underground) (Oil shales)

MEYEROVICH, E.A., prof., doktor tekhn.nauk

Research work conducted in 1958 by the G.M.Krzhizhanovskii
Electric Power Institute on the use of electric current for
preparing the coal layer. Podzem.gaz.ugl. no.4:30-34 '59.
(MIRA 13:4)

1. Energeticheskii institut im. G.M.Krzhizhanovskogo AN SSSR.
(Coal gasification, Underground)
(Electricity in mining)

POLOV, V.I.; ZAKHARIN, A.G.; MARKOVICH, I.M.; TOLSTOV, Yu.G.;
GUREVICH, B.A.; KRACHENSKIY, N.N.; LEBEDEV, M.M.;
MISHAYLOV, V.I.; DENISOV, V.I.; MOSKVITIN, A.I.;
MEYEROVICH, E.A.; TELESHEV, E.A.; STEKOL'NIKOV, I.S.;
LAPITSKIY, V.I.; KHLYSER, I.M.

Veniamin Isaakovich Veits; obituary. Elektrichestvo c.4:
91-92 Ap '61. (MIRA 14: -)
(Veits, Veniamin Isaakovich, 1905-1961)

POPKOV, V.I.; TOLSTOV, Yu.G.; STEKOL'NIKOV, I.S.; MEYEROVICH, ~~V.I.~~
MOSKVITIN, A.I.; TAFT, V.A.; GORUSHKIN, V.I.; SOVALOV, S.A.;
LIBKIND, M.S.

Sixtieth birthday of I.M. Markovich. Elektrichestvo no.5:
87 My '61. (MIRA 14:9)
(Markovich, Isaak Moiseevich, 1901-)

MEYEROVICH, E.A., prof., doktor tekhn. nauk, red.; GRIGOR'YEV, Ye.N.,
red. izd-va; ASTAF'YEVA, G.A., tekhn. red.

[Magnetic field and electrodynamic forces in the melting zone
of large aluminum electrolyzers] Magnitnoe pole i elektrodina-
micheskie sily v zone rasplava moshchnykh elektrolizerov aliuriniia.
Pod obshchei red. E.A.Meerovicha. Moskva, Izd-vo Akad. nauk SSSR,
1962. 122 p. (MIRA 15:6)

1. Akademiya nauk SSSR. Energeticheskiy institut.
(Magnetic fields) (Aluminum—Electrometallurgy)

GORUSHKIN, V.I.; KOVAL'KOV, G.A.; KOZLOVSKIY, G.F.; LUTIDZE, Sh.I.;
MARKOVICH, I.M.; MEYEROVICH, E.A.; MIKHNEVICH, G.I.;
POPKOV, V.I.; STEKOL'NIKOV, I.S.; TAFT, V.A.; TOLSTOV, Yu.G.

Sixtieth anniversary of the birth of A.I. Moskvitin. Elektrichestvo
no.4:94 Ap '62. (MIRA 15:5)

(Moskvitin, Anatolii Ivanovich, 1902-)

MEYEROVICH, E.A.; ANDREYEVSKAYA, L.I.

Determination of the stationary front of a moving thermoelectric
breakdown and analysis of the steady-state conditions. Elektro-
energetika no.5:74-89 '62. (MIRA 15:4)
(Dielectrics)

MEYEROVICH, K.A.; HADJIAN, K.M.

Method for calculating the current density distribution from the cross section of two conductors allowing for their mutual influence. Dokl. AN Azerb. SSR 19 no.6:17-23 '83 (MIRA 17:27)

1. Institut energetiki AN AzSSR. Predstavleno akademikom AN AzSSR Ch.M. Dzhubarly.

BABAT, Georgiy Il'ich[deceased]; LEBEDEV, N.A., kand. tekhn. nauk;
LYUBIMOV, M.L., kand. tekhn. nauk; MEYEROVICH, E.A., prof.
red.

[Induction heating of metals and its industrial applica-
tions] Induktsionnyi nagrev metallov i ego promyshlennoe
primeneniye. Izd.2., perer. i dop. Moskva, Energiia, 1965.
551 p. (MIRA 18:9)

L 24077-66 EWT(l)/EWP(m)/EWT(m)/EWA(d)/T/EWA(h)/EWA(l) JKT/WN/JW/JWD/WE/JT
ACC NR: AP0014966 SOURCE CODE: UR/0281/65/000/002/0158/0159

AUTHOR: Alad'yov, I. T.; Aleksandrov, D. K.; Baun, V. A.; Golovina, Ye. S.;
Gol'denberg, S. A.; Zhimorin, D. G.; Zakharin, A. G.; Iyevlev, V. N.; Knorre, V. G.;
Kozlov, G. I.; Leont'yeva, Z. I.; Markovich, I. M.; Meyerovich, E. A.; Mikhnovich, G. V.;
Popkov, V. I.; Popov, V. A.; Prodvoditelev, A. S.; Pyatnitsky, L. M.; Styrlikovich,
M. A.; Tolstoy, Yu. G.; Tsukhanova, O. A.; Chukhanov, Z. F.; Sheyndlin, A. Ye.

ORG: none

TITLE: Lev Nikolayevich Khitrin

SOURCE: USSR. Izvestiya. Energetika i transport, no. 2, 1965, 158-159

TOPIC TACS: academic personnel, physics personnel, combustion, carbon, high temperature research, plasma beam, fuel

ABSTRACT: Professor L. N. Khitrin Corresponding Member, Academy of Sciences USSR, State Prize Laureate, and Doctor of Engineering Sciences, died after a short but severe illness at the age of 58. He was well known here and abroad as an outstanding scientist and specialist in the field of combustion theory and the development of methods for speeding up burning of fuel. He began his scientific work at the All Union Heat Engineering Institute after graduating from the physics department of Moscow University in 1930. His early work was on the propagation of flames in gases, and on heterogenous combustion. In 1948 he defended his Doctor's Dissertation on the theory of combustion of car-

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UDC: 621.036.92

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ACC NR: AP6014966

bon. His monograph "Combustion of Carbon" was awarded the State Prize in 1950. In 1951 he became the permanent director of the laboratory for the intensification of combustion processes of the G. M. Khrushchevskiy Power Institute. He was elected a corresponding member of the Academy of Sciences USSR in 1955. He headed the All Union Advisory Board on combustion, represented Soviet science at International Symposia, and was a member of the International Institute of Combustion. For a number of years, he directed the Moscow general seminar on combustion, and took an active part in the work of the Scientific Council of the Academy of Sciences USSR, on high temperature heat physics, and of the scientific council on the comprehensive utilization of fuel. He devoted a large amount of attention to teaching work. He directed the Combustion Division of the Physics Department of Moscow State University. His monograph "Physics of Combustion and Explosion" (1957) is a basic text for students in this field. Three Doctor's Dissertations and fifteen Candidate Dissertations were defended under his direction. In the last years of his life he directed work on methods for comprehensive utilization of fuel at power stations so as to obtain valuable products from the mineral part of the fuel, as well as work on the physical chemical processes in a plasma stream, and the mechanism of interaction between carbon and gases. He was the author of more than 60 scientific works, for which he was awarded the Order of the Red Banner of Labor and medals. Orig. art. has: 1 figure. [JPRS]

SUB CODE: 21, 20 / SUBM DATE: none

Card 2/2 *aka*

MEYEROVICH, E.A.; KOSTIN, A.A.; KOKURKIN, B.P., VLADIMIROV, S.P.

Studying the influence of ferromagnetic elements on the construction of powerful aluminum electrolytic cells on magnetic fields in the zone of melting. TSvet met. 38 no.11: 84-90 N '65. (MIRA 18:11)

MEYEROVICH, G.B., inzh.

Establishment of radio communication at the construction sites
of electric substations and high-voltage lines. Energ. stroi.
no. 4:60-63 '65. (MIRA 18:12)

MEYEROVICH, G.

11 B

Determination of 2-methyl-1,4-naphthoquinone (vitamin K₂) in blood and tissues. F. E. Martinson and G. I. Mostovskiy. *Biochimiya* 10, 274-274 (1945). The reaction of amines with quinones (Zincke, *Ber.* 18, 1885) is utilized for the detn. of 2-methyl-1,4-naphthoquinone. A 50-100-ml. separatory funnel, contg. 5-10 ml. of blood or plasma and 10 ml. of ligroin is gently shaken for 3-5 min. If the layers do not sep. readily, the material is centrifuged 10 min. To 5 ml. of the ligroin layer is added 2 ml. of aniline, and the mixt. is shaken. The color of the aniline layer is compared in a test tube with standards contg. 5 ml. of ligroin, 2 ml. of aniline, and 0.025-0.25 mg. of 2-methyl-1,4-naphthoquinone. The amt. multiplied by 40 gives the mg. $\frac{1}{2}$ of vitamin in the blood.

Chen Chy Chen, 2nd Leningrad Med Inst

ASB-55A METALLURGICAL LITERATURE CLASSIFICATION

MEYEROVICH, G. 118

Chem. Org. Chem.

Determination of the bisulfite derivative of vitamin K₂ (vikasol) and its transformation in the organism. (S. I. Meierovich (Second Leningrad Med. Inst.) Nauchn. Zh. 45-52 (1946) (English summary). The method of Scudi and Buha (C.A. 30, 4643) for the detn. of vitamin K₂ (2-methyl-1,4-naphthoquinone) can be applied directly to the bisulfite deriv. of vitamin K₂ (vikasol). The reagents do not interfere, and need not be removed. The bisulfite deriv. is much less toxic than the free vitamin. When injected intravenously, the concn. of the bisulfite deriv. in the blood rapidly diminishes, but a small amt. can still be observed after 2 hrs.; vitamin K₂ is gradually liberated in the blood and can be detected in the urine. H. Priestley

ASSOCIATED METALLURGICAL LITERATURE CLASSIFICATION

MEYEROVICH, G.I.
NEMIROVSKIY, N.L.; MEYEROVICH, G.I.

Colorimetric method for the quantitative determination of metacrylic acid methyl ester in the air in industrial premises. Gig. i san. 23 no.2:83-85 F '58. (MIRA 11:4)

1. Iz laboratorii organicheskoy khimii Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.

(ACRYLATES, determination,
metacrylic acid methyl ester in air, colorimetric determ.
in indust. (Rus))

(AIR POLLUTION, determination,
metacrylic acid methyl ester, colorimetric determ. in
indust. (Rus))

NEMIROVSKIY, N.L., dotsent; MEYEROVICH, G.I., assistant

Method for determining the organic phosphorus insecticide L-11-6
in the air of workrooms. Gig. i san. 24 no.7:80-81 J1 '59.
(MIRA 12:9)

1. Iz kafedry gigiyeny truda i laboratorii organicheskoy khimii
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo instituta.
(PHOSPHATES, determ.

organic phosphorus insecticide determ. in air
of working places, method (Rus))

(AIR POLLUTION, determ.
same)

MEYEROVICH, G. M.

Planning the finances of industrial enterprises. Fin. SSSR
17 no.12:17-22 D '56. (MLRA 10:1)

(Finance) (Industrial management)

25(3)

PHASE I BOOK EXPLOITATION

SOV/1660

Meyerovich, Grigoriy Mikhaylovich, and Nikolay Sergeyevich Shumov

Finansirovaniye i kreditovaniye predpriyatiy legkoy promyshlennosti
(Financing and Crediting Light Industry Establishments) Moscow,
Gizlegprom, 1958. 241 p. 5,500 copies printed.

Reviewer: M. I. Pevzner; Ed. (Title page): N. T. Nikitin; Ed. (Inside
book): N. M. Segal'; Tech. Ed.: L. Ya. Medvedev.

PURPOSE: The manual is intended for students in tekhnikums of the
textile industry and other branches of light industry. It may
also be useful to factory workers and serve also as a textbook
for courses and seminars.

COVERAGE: This manual discusses: 1) principles of financial
organization in industrial establishments; 2) methods of planning
and using capital accumulations and current assets; 3) the
sequence followed in financing capital construction and
general overhaul; 4) problems encountered in setting up financial

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Financing and Crediting (Cont.)

SOV/1660

plans; and 5) short-term crediting of establishments and making payments. Data on production costs, income turnover, taxes etc. quoted in this textbook in tables and calculations, are used for illustrative purposes only. Chapters I, V, and VI were written by N.S. Shumov, and Chapters II, III, IV, and VII by G.M. Meyerovich. There are no references or personalities mentioned.

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Card 2/6

MEYEROVICH, Grigoriy Mikhaylovich; SHUKOV, Nikolay Sergeyevich, kand.
ekon.nauk; MITEL'MAN, Ye., otv.red.; FILIPPOVA, E., red.
izd-va; LEBEDEV, A., tekhn.red.

[Financial organization in an industrial enterprise; based on
materials of textile industry enterprises] Organizatsiia
finansov na promyshlennom predpriatii; po materialam pred-
priatii tekstil'noi promyshlennosti. Moskva, Gosfinizdat,
1960. 109 p. (MIRA 13:4)
(Textile industry--Finance)

MEYEROVICH, Grigoriy Mikhaylovich; GOLOVASTIKOV, A.A., retsenzent;
BARON, M.A., red.; KOPELEVICH, Ye.I., red.; SHAPENKOVA, T.A.,
tekhn. red.

[Analysis of the financial operations of a textile enterprise]
Analiz finansovoi deiatel'nosti predpriatiia tekstil'noi pro-
myshlennosti. Pod red. M.A.Baruna. Moskva, Izd-vo nauchno-
tekhn. lit-ry RSFSR, 1961. 90 p. (MIRA 15:3)
(Textile industry—Finance)

MEYEROVICH, Il'ya Borisovich, inzh.; SLITSKAYA, I.M., inzh., red.; SHILLING, V.A., red. izd-va; BELOGUROVA, I.A., tekhn. red.

[Practice of the Leningrad "Russkii Dizel'" Plant in mechanizing operations in the casting house] Opyt leningradskogo zavoda "Russkii dizel'" po mekhanizatsii liteinogo tsekha. Leningrad, 1961. 13 p. (Leningradskii Dom nauchno-tekhnicheskoi propagandy. Obmen peredovym opytom. Seriya: Liteinoe proizvodstvo, no.4) (MIRA 14:7)
(Leningrad—Founding)

PHASE I BOOK EXPLOITATION SOV/5458

Girshovich, Naum Grigor'yevich, Doctor of Technical Sciences, Professor, ed.

Spravochnik po chugunnomu lit'yu (Handbook on Iron Castings) 2d ed., rev. and enl. Moscow, Mashgiz, 1961. 800 p. Errata slip inserted. 16,000 copies printed.

Reviewer: P. P. Berg, Doctor of Technical Sciences, Professor; Ed.: I. A. Baranov, Engineer; Ed. of Publishing House: T. L. Leykina; Tech. Eds.: O. V. Speranskaya and P. S. Frumkin; Managing Ed. for Literature on Machine-Building Technology (Leningrad Department, Mashgiz): Ye. P. Naumov, Engineer.

PURPOSE: This handbook is intended for technical personnel at cast-iron foundries. It may also be of use to skilled workmen in foundries and students specializing in founding.

COVERAGE: The handbook contains information on basic problems in the modern manufacture of iron castings. The following are discussed: the composition and properties of the metal; the making of molds; special casting methods; the charge preparation; melting

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Handbook on Iron Castings

SOV/5458

and modifying the cast iron; pouring, shaking out, and cleaning of castings; heat-treatment methods; and the inspection and rejection of castings. Information on foundry equipment and on the mechanization of castings production is also presented. The authors thank Professor P. P. Berg, Doctor of Technical Sciences, and staff members of the Mosstankolit Plant, headed by the chief metallurgist G. I. Kletskin, Candidate of Technical Sciences, for their assistance. References follow each chapter. There are 287 references, mostly Soviet.

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Handbook on Iron Castings

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Card 8/11

12.10.1957
MEYEROVICH, I.G. kand.filosofskikh nauk, dotsent (Leningrad, nab.Fontanki,
d.33, kv.139)

Some philosophical conclusions to be drawn from I.P.Pavlov's theories
on the higher nervous activity. Vest.khir. 79 no.7:107-110 Jl '57.
(NERVOUS SYSTEM) (MIRA 10:10)

MEYEROVICH, I.G. (Moskva); MUCHNIK, G.F. (Moskva)

Nonsteady-state temperature field in multilayer systems.
Teplofiz. vys. temp. 1 no.2:291-298 S-O'63. (MIRA 17:5)

MUCHNIK, G.F. (Moskva); MEYEROVICH, I.G. (Moskva)

Nonsteady heat conductivity in systems of contacting solid bodies.
Teplofiz. vys. temp. 1 no.3:404-408 N-D '63. (MIRA 17:3)

L 33669-66 ENT(1) WW/EM

ACC NR: AP6014071

SOURCE CODE: UR/0294/66/004/002/0242/0249

AUTHOR: Meyerovich, I. G.

43
8

ORG: none

TITLE: Approximate method for solution of the nonlinear problem of heat conductivity for an infinite plate in the case when the thermophysical coefficients depend on the temperature

SOURCE: Teplofizika vysokikh temperatur, v. 4, no. 2, 1966, 242-249

TOPIC TAGS: heat conductivity, boundary layer theory

ABSTRACT: The differential equation of heat conductivity with variable physical parameters has the form:

$$\rho c y \frac{\partial t}{\partial \tau} = \frac{\partial}{\partial x} \left[\lambda(t) \frac{\partial t}{\partial x} \right], \quad 0 < x < R. \quad (1)$$

The present article considers first the symmetrical problem with the following boundary conditions:

$$t_{|x=R} = b_1, \quad \frac{\partial t}{\partial x}|_{x=0} = 0, \quad t_{|\tau=0} = 0. \quad (2)$$

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UDC: 517.946:536.21

33659-66

AP6014071

A solution of the above problem mathematically, the article passes on to the unsymmetrical problem, for which the differential equation is written in the form:

$$c(t) \gamma \frac{\partial t}{\partial x} = \frac{\partial}{\partial x} \left[\lambda(t) \frac{\partial t}{\partial x} \right], \quad 0 < x < L \quad (14)$$

with the following boundary conditions:

$$t|_{x=L} = b_T, \quad t|_{x=0} = 0, \quad t|_{t=0} = 0. \quad (15)$$

Finally, the article gives an example of the application of the method to concrete problems of heat conductivity. A determination is made of the temperature field in an infinite plate made of stainless steel, with a linear rise in temperature at the boundary at a rate of 1200° per hour (symmetrical case) if the thickness of the plate is 0.05 meters; a figure exhibits the law of change of the physical properties of the stainless steel as a function of temperature. Orig. art. has: 22 formulas and 2 figures.

SUB CODE: 20/ SUBM DATE: 22Jan65/ ORIG REF: 006

Card 2/2 mc

MELOV, I. I.

Napriazheniia v tonkostennykh konstruktsiakh volizi krep lenii. Moskva,
1940. 32 p., diagrs. (ISAvl. Trudy, no. 475)

Bibliography: p. 31.

Title tr.: Stresses in thin-walled structure near points of attachment.

DAKSA arb(microfilm)

So: Aeronautical Sciences and Aviation in the Soviet Union, Library of
Congress, 195.

PHASE I BOOK EXPLOITATION

SO 7/5842

Meyerovich, Irma Isaakovna

Raspredeleniye napryazheniy v kompressornykh lopatkakh pri kolebaniyakh
(Tension Distribution in Compressor Blades During Oscillation) Moscow
Oborongiz, 1961. 105 p. Errata slip inserted. 3900 copies printed.

Ed.: V. M. Tokar'; Tech. Ed.: V. P. Rozhin; Managing Ed.: A. S. Zaymov-
skaya, Engineer.

PURPOSE: This book is intended for scientific workers and engineers con-
cerned with designing blades for various types of compressors and turbines.

COVERAGE: The book deals with a method for computing the natural vibrations
of compressor blades of arbitrary design which are used in various branches
of industry. A convenient method is given for computing the types and fre-
quencies of natural vibrations and stresses at the limit of resonance. In ad-
dition, a numerical example of the computation of an arbitrary blade and its

Card 1/3

Tension Distribution in (Cont.)

SOV/5842

experimental verification are included. No personalities are mentioned.
References follow each chapter.

TABLE OF CONTENTS:

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Ch I. Blades With Straight Attachments	6
1 Blade geometry	6
2 Geometrical parameters of the medium surface of a blade	7
3. Parameters of strain	10
4. Proper vibration functions of strip-bars	16
5. Free bar with a curvilinear axis	16
6. Cantilever bar with a screw axis	21
7. Bending bar vibrations	23
8. Torsional bar vibration forms	37

Card 2/3

MEYEROVICH, I.I.

Practice of a repair mechanic. Mashinostroitel' no.2:5 F '62.
(MIRA 15:2)
(Leningrad—Machinery industry—Technological innovations)

1. 15190-66 EMT(d)/EMT(m)/EWP(w)/EWP(y)/EWP(k)/EWA(h)/ETC(m)-6 LJP(c) WW/EM/OS
ACC NR: AT6001264 SOURCE CODE: UR/0000/65/000/000/0148/0172

AUTHOR: Mayerovich, I. I. 47
B+1

ORG: none

TITLE: Approximate method of determining the natural frequencies of cylindrical, conical, and toroidal shells.

SOURCE: Prochnost' i dinamika aviatsionnykh dvigateley (Durability and dynamics of aircraft engines); sbornik statey, no. 2. Moscow, Izd-vo "Mashinostroyeniye," 1965, 148-172

TOPIC TAGS: shell of revolution, cylindrical shell, conical shell, toroidal shell, free vibration, shell vibration, shell natural frequency, natural frequency

ABSTRACT: Flexural vibrations of shells of revolution are studied, assuming the existence of nodal lines along meridians and parallels. The characteristic equation for determining the square of the natural frequencies is simplified by imposing certain constraints on displacement components. The Ritz method is used with approximation functions which satisfy the boundary conditions, under assumptions that there are no torsional vibrations in the circumferential direction, and no shear in the middle surface. The expediency of the hypotheses used

Card 1/3

UDC: 534.1-16.014.1:62-215:621.9-434

L 15190-66

ACC NR: AT6001264

here is verified in investigating the vibrational behavior of cylindrical, conical, and toroidal shells. The advantage of the proposed method is that it leads to simple design formulas. The frequency spectra and vibration modes of a cylindrical shell with arbitrary boundary conditions are analyzed, and the obtained general solution is used in particular cases of shell supports (simply supported, cantilever, fixed at both ends, and floating). The results of these calculations are compared in tables with those obtained by other authors and with experimental data. The natural frequency of a built-up shell consisting of two shells of the same radius, but of different rigidities, butt-joined (face-to-face) is also examined and the calculated natural frequencies are shown in a diagram. The vibration of conical shells is analyzed by introducing the shell-geometry and strain parameters, selecting approximation functions, determining the coefficients of the characteristic equation, and giving an approximate formula for the natural frequency with regard to the effect of the taper angle. A conical shell with simply supported edges is discussed in more detail and results are compared with those of exact solutions and experiment by means of a numerical example. It is emphasized that there are no other approximate formulas for determining the natural frequencies of conical shells. Vibration of a thin-walled closed unconstrained, toroidal shell is discussed; it is again emphasized that there are neither theoretical nor empirical data in the

Card 2/3

L 15190-66

ACC NR: AT6001264

literature on the natural frequencies of toroidal shells. The investigative procedure is analogous to that used for conical shells. The effect of the r/R ratio (r is the radius of the rotating circle, R is its distance to the axis of rotation) on the spectrum of natural frequencies is discussed and is illustrated by a diagram. Orig. art. has: 4 figures, 96 formulas, and 7 tables. [VK]

SUB CODE: 20/ SUBM DATE: 17Jul65/ ORIG REF: 006/ OTH REF: 001
ATD PRESS: 4/69

Card 3/3 *vmb*

MEYEROVICH, I. L.

Meyerovich, I. L. "Work experiment in the urological section of an evacuation hospital," Sbornik nauch. rabot evakogospitaley i Kafedry obshchey chirurgii (Irkut. obl. otd. zdravookhraneniya. Irkut. gos. med. in-t), (Irkutsk), 1948, p. 78-84

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

MEYEROVICH, I. L.

Meyerovich, I. L. "Significance of the valve apparatus in varicose swelling of the spermatic cord," (Extract from a candidate's dissertation), Sbornik nauch. rabot evakogospitaley i Kafedry obshchey khirurgii (Irkut. obl. otd. zdavookhraneniya. Irkut. gos. med. in-t), (Irkutsk), 1948, p. 98-104

SO: U-2888, Letopis Zhurnal'nykh Statey, No. 1, 1949

ABATUROV, A.I.; VINOGRADOV, M.A.; DUBROVA, G.B.; LOTOREV, L.M.; ZORIN, S.N.;
VASIL'YEV, A.A.; VOLOKITIN, A.S.; BUKOVETSKIY, A.I.; PEMAZKOV, N.S.;
MEZENTSEV, P.V.; YEGORIKIN, N.I.; DANILOV, M.M.; LUKASHEV, M.Ya.;
MEYEROVICH, I.L.; KLYUCHEV, A.Ye.; SARYCHEV, V.G.; ZAVILOVICH, M.A.;
NOVOSEL'SKIY, N.M.; GITLITS, S.A.; REZNICHENKO, M.S.; MUROZ, L.P.;
KHETAGUROVA, F.V.; CHOGGOVADE, Sh.K.; RYBCHENKO, A.A.; BOCHAROVA, N.P.;
GAGLOYEVA, N.A.; KRYUKOVA, T.B.

Rubinshtein, Grigori Leonidovich; 1891-1959. Sov. torg. 33 no.12:56
D '59. (MIRA 13:2)

(Rubinshtein, Grigori Leonidovich, 1891-1959)

MEYERCVICH, I. M.

"Investigation of Universal Spindles of Rolling Mills." Sub 24 Dec 51,
Central Sci Res Inst of Technology and Machine Building (TsNII Mash)

Dissertations presented for science and engineering degrees in
Moscow during 1951.

EX: Sum. No. 270, 6 May 55

~~MEYEROVICH~~, I.M., kand. tekhn. nauk; POPOVA, S.M., tekhn. red.; TIKHONOV,
A.Ya., tekhn. red.

[Study and design of universal spindles for rolling mills] Issledovanie i raschet universal'nykh shpindlei prokatnykh stanov. Moskva, Gos. nauchno-tekhn. izd-vo mashinostroit. i sudostroit. lit-ry, 1954. 38 p. (Nauchno-tekhnicheskaya informatsiya, 22). (MIRA 11:7)
(Rolling mills)

MEYEROVICH, I.M., kandidat tekhnicheskikh nauk; POPOVA, S.M., tekhnicheskii redaktor; TIKHONOV, A.Ya., tekhnicheskii redaktor.

Testing and calculations for universal spindles of rolling-mill machinery. Nauchno-tekhnicheskaya informatsiya no.22:3-38 '54.
(Rolling-mill machinery) (MLRA 7:11)

MEYEROVICH, I. M., ROKOTYAN, Ye. S., Candidates of Techn. Sciences; ALEKSANDROV, A. A., Prof.; SAKHAROV, A. I. Docent; STUKALOV, M. I., Engr.; YASECHENKO, V. A., Engr.; DOLMATOV, F. M., Engr.;

"Investigation of Power and Strength Characteristics of Blooming Mills to Obtain Maximum Output Capacity," Rolling Mills; Studies, Calculation, Design and Operation, No. 3, Moscow, Mashgiz, 1950. 198 p.

Articles by Rokotyan, Ye. S., Meyerovich, I. M. and others describe results of experiments conducted on blooming, cold-rolling, spiral-mill-dressing, and car wheel rolling mills.

MEYEROVICH, I. M., (Cand. of Techn. Sciences).

"Analysis of Forces Developed in the 1000-Type Cold-Feduction Mill,"
Rolling Mills; Studies, Calculation, Design and Operation, No. 3,
Moscow, Mashgiz, 1956. 258 p.

AID P - 5076

Subject : USSR/Engineering

Card 1/1 Pub. 128 - 5/26

Authors : Rokotyan, Ye. S., and I. M. Meyerovich, Kandidats
Tech. Sci.

Title : Measuring the pressure of metal on rollers by means of
a universal dynamometer.

Periodical : Vest. mash., 5, 10-12, My 1956

Abstract : The authors describe a new method, developed in the
Central Scientific Research Institute of Technology and
Machine Building, for measuring pressures in rolling
mills. The universal dynamometer is composed of an
electric transmitter and calibrating gauge. This
dynamometer compares favorably with other dynamometers,
the defects of which are pointed out. The advantages
of the new type dynamometer are emphasized. 2 diagrams.

Institution : None

Submitted : No date

SOV/137-57-6-9899

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 83 (USSR)

AUTHORS: Rokotyan, Ye.S., Meyerovich, I.M., Zhuravskiy, Yu. V.

TITLE: An Investigation of the Auxiliary Mechanisms of the 1000 Blooming Mill (Issledovaniye vspomogatel'nykh mekhanizmov bluminga 1000)

PERIODICAL: V sb.: Prokat. stany. Nr 6. Moscow, Mashgiz, 1956, pp 74-123

ABSTRACT: An investigation is made of the auxiliary mechanisms of the 1000 blooming mill: The ingot buggy, the ingot turner, the mill tables, the manipulator, and the transfer - at one of the southern plants of the Soviet Union. Oscillographic recording of the work of the electric drives determines the primary power characteristics of the mechanisms being investigated, monitors the correctness of the choice of power for the electric drives, and reveals the true work done by the mechanisms. Determination of stresses in the individual units of the mechanisms is performed by means of wire strain gages. Exhaustive data useful to designers at heavy machinery plants in planning similar mechanisms and to personnel of metallurgical plants in utilizing the equipment are presented.

Card 1/1

B.Ye.

SOV/124-58-3-3612

Translation from: Referativnyy zhurnal, Mekhanika, 1958, Nr 3, p 140 (USSR)

AUTHORS: Meyerovich, I. M., Yershov, I. M.

TITLE: New Design of a Current Pickup for Torque Measurements
(Novaya konstruktsiya tokos'yemnogo ustroystva pri izmerenii
krutyashchikh momentov)

PERIODICAL: V sb.: Prokatn. stany. Nr 8. Moscow, Mashgiz, 1956, pp 255-
257

ABSTRACT: Bibliographic entry

Card 1/1

ROKOTYAN, Ye.S., kandidat tekhnicheskikh nauk; MEYEROVICH, I.M., kandidat tekhnicheskikh nauk.

Measuring the metal pressure on rollers by a universal dynamometer.
Vest.mash. 36 no.5:10-12 My '56. (MLRA 9:8)
(Rolling (Metalwork)) (Dynamometer)

ROKOTYAN, Ye.S., kandidat tekhnicheskikh nauk, MEYEROVICH, I.M., kandidat tekhnicheskikh nauk; ZHURAVSKIY, Yu.V., kandidat tekhnicheskikh nauk.

Study of the auxiliary equipment of a 1000 blooming mill. [Trudy]
TSNIITMASH no.78:74-123 '56. (MLRA 10:1)
(Rolling mills)

MEYEROVICH, T. A.

ROEDFYAN, Ye.S., kandidat tekhnicheskikh nauk; MEYEROVICH, I.M., kandidat tekhnicheskikh nauk; ALEKSANDROV, A.A., professor; SAKHAROV, A.I., dotsent; STUKALOV, M.I., inzhener; YASHCHENKO, V.A., inzhener, DOLMATOV, F.M., inzhener.

Improving the performance of blooming mills by determining potentialities in factors of strength and power of the equipment.

[Trudy] TSNITMASH no.33:134-147 '56. (MLRA 1:9)
(Rolling mills) (Mechanics)

MEYEROVICH, I.M., kandidat tekhnicheskikh nauk.

Investigating the effect of forces in rolling railroad car wheels
and turbine blades. [Trudy] TSMITMASH no.83:172-183 '56.

(MLRA 10:9)

(Rolling (Metalwork)--Testing) (Wheels)

MEYEROVICH, I.M., kandidat tekhnicheskikh nauk.

Investigating force parameters on a 1630 metal shearing machine.

[Trudy] TSMIRKAS no. 33:194-194 '56. (MIRA 1956)

(Rolling mills) (Metals--Hardening) (Dynamometer)

GELBI, Shander, [Geleji, Sander],; POBEDIN, I.S., kand. tekhn. nauk,
[translator],; MEYEROVICH, I.M., kand. tekhn. nauk, [translator],;
ROKOTYAN, Ye.S., doktor tekhn. nauk, red.; BERLIN, Ye.H., red. izd-va.,;
ISLENT'YEVA, P.G., tekhn. red.

[Calculations of forces and power requirements for the plastic
deformation of metals] Raschet usilii i energii pri plasticheskei
deformatsii metallov. Moskva, Gos. nauchno-tekhn. izd-vo lit-rv
po chernoi i tsvetnoi metallurgii, 1958. 419 p. [Translated from
the Hungarian]. (MIRA 11:11)

(Metalwerk)

MEYEROVICH, I.M.

Drawing tetrafluoroethylene films. Biul.tekh.-ekon.inform. no.11:
20-22 ' 58. (MIRA 11:12)

(Ethylene) (Films (Chemistry))

137-58-2-12/30
AUTHOR: Meyerovich, I.M., Candidate of Technical Sciences
TITLE: Instrument for Continuous Control of the Metal Pressure
on the Rolls (Pribor dlya nepriyvnogo kontrolya davleniya
metalla na valki)

PERIODICAL: Stal', 1958, No. 11, 718 - 721 (USSR)

ABSTRACT: A new instrument is described which was developed by TsNIITMASH for continuous monitoring of the pressure of the metal on the rolls, which enables establishing optimum reduction conditions without danger of reducing the service life of the equipment. The instrument has passed extensive works tests and is at present working in numerous rolling mills. The instrument consists of a mechanical part and an electric part. The mechanical part consists of a universal measuring box which is so designed that it can be calibrated on the spot where it is installed and, therefore, the conditions of contact during actual measurements are identical with those pertaining during calibration; the measuring accuracy is $\pm 3\%$. A drawing of the most recent design of this universal measuring box for a load of 300 tons is reproduced in Figure 1. The pressure is measured by means of resistance strain gauges. The illustrations show the relative

Card1/2

Instruments for Continuous Control of the Metal Pressure on the
Rolls

SCV/133-58-8-12/30

locations of the strain gauges, a cross-section of the foil-type resistance strain gauge used in this instrument, a cross-section through the pump used for calibrating the metering device, a calibration curve, the basic, circuit diagram of the bridge metering arrangement for measuring the roll pressure, the circuit diagram of the power pack, and also a calibration graph of the instrument (without amplifier) for continuous monitoring of the pressure of the metal on the rolls. The here described instrument is suitable for automatic recording of the pressure of the metal on the rolls and also for use in conjunction with automation of the rolling regime. The instrument has been developed, under the guidance of the author, by engineers V.I. Orlov, I.M. Yershov and technician V.N. Luk'yanov. There are 9 figures.

ASSOCIATION: TSMIITLASH

Card 2/2

1. Rolling mills---Control systems
2. Pressure---Control
3. Metals---Processing
4. Strain gages---Applications

MEYEROVICH, I. M.

2(1)

CHERNOBA Metallurgy, Chernobyl, 1979, 5 (Metal Forming);
Collection of Articles, No. 5) Moscow, Metallurgizdat, 1979, 197 p.
3,000 copies printed.

Scientific M.: L.D. Al'shevskiy, Candidate of Technical Sciences; M. of
Publishing House: P.A. Volov; Tech. M.: A.I. Shvabov.

Summary: This collection of articles is intended for technical personnel and
scientific workers in the metallurgical and machinery-construction industries.

Contents: This collection of articles deals with problems of rolling and tube
manufacture. Results of research done on roll design and new methods of deter-
mining rolling parameters in the production of tubes and other
rolled shapes are presented. Methods of analyzing the kinematics of processes
in helical piercing mills and rolling mills by means of motion pictures are
discussed. Also discussed are several phenomena associated with tube rolling.
In generalization are mentioned. References follow several of the articles.

Pyatkovskiy, A.A. [Candidate of Technical Sciences, Vsesoyuznyy nauchno-
issledovatel'skiy tsentr (All-Union Scientific Research Institute for
Pipe)]. Investigation of the Kinematics of Processes in Helical Piercing Mills
by Motion Picture Filming and Other Methods.

128

This article deals with industrial and laboratory tests of a method of in-
vestigating kinematic processes in rolling by means of motion pictures.
The mechanism of the process is discussed. Experimental results in piercing and
three-high mills are described. Results are shown in tables and diagrams.

Pyatkovskiy, A.A., S.L. Olyin [Candidate of Technical Sciences], and S.O. Bider
[Engineer]. Investigation of the Kinematics of Processes in Helical Piercing Mills
by Motion Picture Filming and Other Methods.

129

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

Yevlisko, I.M. [Candidate of Technical Sciences]; A.A. Shvabovskiy [Doctor of
Technical Sciences]; and I.P. Zhuravskiy [Candidate of Technical Sciences].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

130

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

131

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

132

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

133

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

134

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

135

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

136

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

137

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

138

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

139

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

140

Pyatkovskiy, A.A. [Candidate of Technical Sciences], and P.P. Lopyrev [Engineer].
Investigation of the Kinematics of Processes in Helical Piercing Mills by
Motion Picture Filming and Other Methods.

141

This article deals with an experimental investigation of the use of stainless
steel with a high deformation coefficient in piercing processes. Results
show an increase in the rate of production and greater economy of materials.

NOT REPRODUCIBLE

PHASE I BOOK EXPLOITATION SOV/5471

Moscow. Vsesoyuznyy institut nauchnoy i tekhnicheskoy informatsii.

Prokatnyye stany. [Sbornik] 1 ([Metal] Rolling Mills. [Collection] 1)
Moscow, 1959. 272 p. 2,000 copies printed.

Sponsoring Agencies: Gosudarstvennyy nauchno-tekhnicheskii komitet
Soveta Ministrov SSSR. Akademiya nauk SSSR.

Ed.: Ye. S. Rokotyan, Doctor of Technical Sciences; Tech. Eds.: G. A.
Shevchenko and N. G. Goncharov.

PURPOSE: This collection of articles is intended for technical
personnel in rolling mills, educational institutes, and design
offices.

COVERAGE: The collection contains articles dealing with the present
status of methods used in metal rolling. Attention is given to
the design and operation of sheet and planetary mills, electric
drives of equipment used in rolling shops, and instruments for

Card 1/3

[Metal] Rolling Mills (Cont.)

SOV/5471

measuring metal-rolling process parameters. D. P. Morozov, Doctor of Technical Sciences, and I. S. Pobedin, Candidate of Technical Sciences, edited some parts of the book. References accompany each article. There are 131 references, Soviet and non-Soviet.

TABLE OF CONTENTS.

Foreword

1. Rokotyan, Ye. S. [Doctor of Technical Sciences]. Modern Sheet Mills	3
2. Bur'yanov, V. F. [Candidate of Technical Sciences]. Planetary Mills	4
3. Filatov, A. S. [Candidate of Technical Sciences]. Modern Electric Drive for the Basic Equipment of Rolling Mills	79
Card 2/3	126

[Metal] Rolling Mills (Cont.)

SOV/5471

4. Zhuravskiy, Yu. V. [Candidate of Technical Sciences]. Electric Equipment for the Auxiliary Mechanisms of Rolling Mills 187
5. Meyerovich, I. M. [Candidate of Technical Sciences]. Instruments for Measuring the Force Parameters of Rolling Mills 217

AVAILABLE: Library of Congress (TS340.M67)

Card 3/3

VK/wrc/jw
9-14-61

MEYEROVICH, I.M., kand. tekhn. nauk; LAVROV, P.P., inzh.

Twisting moments in pipe rolling on continuous, seven-stand mills.
Obr. met. davl. no.5:165-174 '59. (MIRA 13:3)

1.TSentral'nyy nauchno-issledovatel'skiy institut tekhnologii i
mashinostroyeniya.

(Rolling mills)

S/028/6*/000/001/002 005
B021/B054

AUTHOR: Meyerovich, I. M.

TITLE: Standard device for the continuous control of metal pressure
on rolls

PERIODICAL: Standartizatsiya, no. 1, 1961, 25-28

TEXT: The Vsesoyuznyy nauchno-issledovatel'skiy i proyektno-konstruktor-skiy institut metallurgicheskogo mashinostroyeniya (All-Union Scientific Research Institute for the Planning and Design of Metallurgical Machinery) developed a standard device for the continuous control of metal pressure on rolls. Rolling mills with loads of 100-2000 t can be equipped with this device. The Institute also prepared a standard for it. A standard device for the continuous control of metal pressure on rolls was considered to be necessary in order to standardize the existing measuring devices and electric circuits and to obtain a dependable apparatus for the series equipment of rolling mills. The series of measuring devices adopted corresponds to the metal pressure on rolls according to ГОСТ 8032-56 (GOST 8032-56): R5: for loads of 100, 160, 250, and 400 t, Card 1/3

S, 026/61/000/001/002/005
B021/B054

Standard device for the continuous ...

R10: for loads of 500, 630, 800, and 1000 t, R20: for loads of 1250, 1400, 1600, 1800, and 2000 t. To eliminate the effect of dynamic loads, steam, mineral oil, water, emulsions, and high temperatures, the measuring devices must be hermetically sealed and of sturdy construction, and ensure an accuracy of measurement of $\pm 3\%$. The mechanical part of the device comprises a measuring and a calibrating device. The figure shows a device for the continuous control of metal pressure on rolls. The electrical part of the device comprises a system of strain gauges, a power-supply unit consisting of rectifier, stabilizer, autotransformer and supply mains, as well as an indicating and self-recording instrument. An МПШПЛ-54 (MPShchPL-54) microammeter is used. The scale of the indicator is calibrated in tons of metal pressure on rolls. Devices of various designs for the continuous control of metal pressure on rolls in cold and hot rolling mills were installed and tested in 1957-60. Some of them worked without interruption for two years. On the basis of the data obtained, it was possible to develop efficient rolling procedures, to increase the output of rolling mills by 15-20%, and to reduce the number of fractures. Measuring devices must be checked at least twice a year, and calibrated every three months. There are 1 figure and 1 table.

Card 2/3

Standard device for the continuous ...

S/028/61/000/001/002/005
B021/B054

Legend to the Fig.: Standard device
for the continuous control of metal
pressure on rolls. 1: plunger piston,
2: ... 3: body, 4: packing,
5: ... 6 and 7: packings,
8: elastic feeler, 9: base

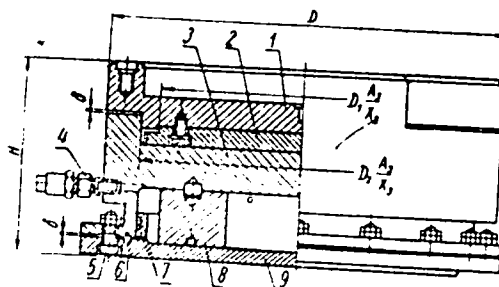


Fig.

Card 3/3

MEYEROVICH, I. M.

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PHASE I BOOK EXPLOITATION

SCV/5985

Rokotyan, Ye. S., Doctor of Technical Sciences, ed.

Prokatnoye proizvodstvo; spravochnik (Rolling Industry; Handbook) v. 1. Moscow, Metallurgizdat, 1962. 743 p. Errata slip inserted. 9250 copies printed.

Authors of this volume: B. S. Azarenko, Candidate of Technical Sciences; V. D. Afanas'yev, Candidate of Technical Sciences; M. Ya. Brovnan, Engineer; M. P. Vavilov, Engineer; A. B. Vainik, Engineer; K. A. Golubkov, Engineer; S. I. Gubkin, Academician, Academy of Sciences USSR; A. Ya. Guravich, Engineer; V. I. Davydov, Candidate of Technical Sciences; V. G. Dronov, Engineer; N. Z. Iermolayev, Engineer; Ye. A. Zhukovich-Stolpa, Engineer; N. M. Kirilin, Candidate of Technical Sciences; M. V. Korynev, Engineer; A. M. Kogon, Engineer; A. A. Korolev, Professor; M. Ye. Kuryenko, Engineer; A. V. Lankin, Engineer; B. A. Levitanskiy, Engineer; V. M. Lyskov, Engineer; I. M. Meyerovich, Candidate of Technical Sciences; M. S. Ovcharov, Engineer; V. I. Pasternak, Engineer; I. L. Perlin, Doctor of Technical Sciences; I. S. Pobedin, Candidate of Technical Sciences; Ye. S. Rokotyan, Doctor of Technical Sciences; M. M. Saf'yan, Candidate of Technical Sciences; V. V. Smirnov, Candidate of Technical Sciences; V. S. Smirnov, Corresponding Member, Academy of Sciences USSR; O. P. Sokolovskiy,

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Rolling Industry; Handbook

SOV, 5925

Engineer; O. P. Solov'yov, Engineer; M. A. Sidorkevich, Engineer; Ye. M. Trut'yukov, Engineer; I. S. Trishchinskiy, Candidate of Technical Sciences; G. R. Khankin, Engineer; and A. I. Tsollikov, Corresponding Member, Academy of Sciences USSR. Introduction: A. I. Tsollikov, Corresponding Member, Academy of Sciences USSR; Ye. S. Mokotyan, Doctor of Technical Sciences; and L. S. Al'shevskiy, Candidate of Technical Sciences.

Eds. of Publishing House: V. M. Gorobinchenko, R. M. Golubchik, and V. A. Rymov; Tech. Ed.: L. V. Dobushinskaya.

PURPOSE: This handbook is intended for technical personnel of metallurgical and machine-building plants, scientific research institutes, and planning and design organizations. It may also be useful to students at schools of higher education.

COVERAGE: The fundamentals of plastic deformation of metals are discussed along with the theory of rolling and drawing. Methods of determining the power consumption and the forces in rolling with plane surface or grooved rolls are

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Rolling Industry; Handbook

SCV/5985

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MEYEROVICH, I.M.; MIKHAYLOV, Yu.P.; FILATOV, A.S.

Measuring of stresses during metal rolling. Priborostroenie
no.3:21-22 Mr '63. (MIRA 16:6)

(Rolling(Metalwork))
(Strains and stresses—Measurement)

MEYEROVICH, Isaak Markovich; FILATOV, Aleksey Sergeyevich; GOLUBCHIK,
R.M., red.; DOBUZHINSKAYA, L.V., tekhn. red.

[Measuring pressures in rolling] Izmerenie usilii pri prokatke.
Moskva, Metallurgizdat, 1963. 226 p. (MIRA 16:6)
(Rolling mills) (Strain gauges)

1. 1.19.2-65 EWP(k)/EWP(z)/EWA(c)/EWT(d)/EWT(m)/EWP(h)/EWP(b)/EWA(d)/EWP(l)/EWP(v)/
EWP(t) Ef-L NMW/ID/HW

ACCESSION NR: AR5008964

S/0137/65/000/001/D011/D012
621.771.001

SOURCE: Ref. zh. Metallurgiya, Abs. 1D60

AUTHOR: Meyerovich, I. M.; Pankin, V. A.; Dobkin, V. L.

TITLE: Industrial operation of the 2800 mill and rolling of large tapered sheets

CITED SOURCE: Tr. Vses. n.-i. i proyektno-konstrukt. in-ta metallurg. mashinostr.,
sb. 13, 1964, 57-84

TOPIC TAGS: metallurgy, ferrous metal, rolling mill

TRANSLATION: A 2800 mm rolling mill for large tapered sheets was designed at
VNIIMETMASH and manufactured at NKMZ. The rolling equipment is considered and the
production method is briefly described. The special feature of this mill is that
deformation of the metal takes place with a continuous change of span between the
rollers throughout the length of the sheet. Tension must be constant along the
width and controlled along the length of the sheet. This means that precise ad-
justment of all working mechanisms is required to obtain optimum rolling conditions

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ACCESSION NR: AR5008964

which assure the correct taper for the sheets. In development of rolling systems extensive studies were made on the choice of a method for producing tapered sheets, plotting pressure curves, determining working stand rigidity and roller shape etc. The actual values of the metal pressure on the rollers, tension, deflection of the rollers, dimensions of the rolled product etc. were measured at the same time since production of tapered sheets is connected with these operations. Optimal conditions for heat treatment, cold working, stretching and straightening were also determined. The work done on adjustment and adaptation for production of the 2800 rolling mill insured its normal use in rolling of sheets with a varying degree of taper. The mill is recommended in selecting industrial rolling systems and producing a batch of experimental and industrial tapered sheets from alloy D16.

SUB CODE: 1E, MM

ENCL: 00

Card 2/2 mb

L 61914-65 EWT(d)/EWT(m)/EWP(w)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(h)/
EWP(b)/EWP(l)/EWA(c) Pf-4/Ps-4 JD/HW/EM

ACCESSION NR: AP5017689

UR/0133/65/000/007/0622/0628
521.771.0

AUTHOR: Tselikov, A. I.; Polukhin, V. P.; Polyashov, V. S.; Meyerovich, I. M.

TITLE: Increasing the stiffness of rolling mill housings in connection with the improvement in precision of the sheet rolling process

SOURCE: Stal', no. 7, 1965, 622-628

TOPIC TAGS: rolling mill, elastic deformation, mathematical analysis, pressure measurement, mechanical engineering, housing

ABSTRACT: The stiffness of rolling mill housings is analyzed in terms of the additive elastic deformations of the various elements of the housing, for the purpose of improving the housing stiffness. Experiments were conducted on a contemporary four-high mill of simple design, using a 1700 type housing, with working rolls of 650 mm diameter and supporting rolls of 1700 mm diameter; the maximal tolerance for the force of the metal on the rolls was 2100 T. Data are given for the elastic deformation of different portions of the mill (measured by a strain gauge) as a function of mill pressure. A diagram is shown for the force distribution acting on the

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ACCESSION NR: AP5017689

3

mill rolls and bearings. Also, the pressure acting on the work rolls and on the supporting rolls is analyzed and presented; this was subtracted from the total pressure and the housing pressure was determined. Experimental data are presented for the elastic deformations of the housing elements and compared with calculated values. These were summed to give the total housing deformation as a function of mill pressure. Mechanical formulas are presented, incorporating the mill variables, and an equation is given for the coefficient of stiffness in terms of the pressure and elastic deformation of the housing elements. It was concluded that this method of increasing the precision of the rolling process should result in improved economy in production. Orig. art. has: 8 figures, 4 tables.

ASSOCIATION: VNIIMETMASH; Moskovskiy institut stali i splavov (Moscow Institute of Steel and Alloys)

SUBMITTED: 00

ENCL: 00

SUB CODE: 1E, MM

NO REF SOV: 007

OTHER: 000

Card 2/2 *jk*

ISELIKOV, A.I., akademik; MEYEROVICH, I.M., kand. tekhn. nauk; GORELIK,
V.S., inzh.; ROKOTYAN, S.Ye., inzh.

Relation between unit power consumption and the metal pressure
on the rolls. Stal' 25 no.12-1101-1102 D '65.

(MIRA 18-12)

L 03764-67 EWT(m)/EWP(t)/ETI/EWP(k) IJP(c) JD/HW

ACC NR: AR6029481

SOURCE CODE: UR/0137/66/000/006/D007/D007

AUTHOR: Meyerovich, I. M.; Brovman, M. Ya.

TITLE: Problems in the theory of rolling/ribbed sheets , 4

SOURCE: Ref. zh. Metallurgiya, Abs. 6D46

REF SOURCE: Tr. Vses. n. -i. i proyektno-konstrukt. mashinostr. sb. 15, 1965, 93-114

TOPIC TAGS: metal rolling, metal pressing, ribbed sheet, deformation rate, creep

ABSTRACT: Some problems which arise in estimating the rate of deformation are examined, and a method for solving plane problems of the theory of plasticity is used. The creep line fields are individually examined during rolling and pressing. Formulas are derived for engineering calculations. N. Yudina. [Translation of abstract] [AM]

SUB CODE: 13/

Card 1/1

UDC: 621.771.001

VAYSFEL'D, D.N.; MEYEROVICH, I.P.

Changes in the pharyngeal mucosa in vegetative ganglio-
neuritis combined with chronic inflammation of the genital
sphere. Zhur. ush., nos. i gorl. bol. 23 no.1:48-52
Ja-F '63. (MIRA 17:2)

1. Iz kurortnoy polikliniki "Kuyal'nik" g. Odessy (glavnyy
vrach - I.I. Litinetskiy).

ANANCHENKOV, G.; ARTEM'YEV, I. ; MEYEROVICH, L.

Developing a group wage system in mixed brigades. Sots.trud.
5 no.8:108-112 Ag '60. (MIRA 13:11)

1. Nachal'nik otdela organizatsii truda i sarabotnoy platy kombinata "Vorkutugol'" (for Ananchenkov). 2. Nachal'nik otdela organizatsii truda shakhty No.40 kombinata "Vorkutugol'" (for Artem'yev). 3. Nachal'nik planovogo otdela shakhty No.40 kombinata "Vorkutugol'" (for Meyerovich).
(Vorkuta--Coal mines and mining)
(Wage payment systems)

MEYEROVICH, L.

Some suggestions on bonus payments to miners. Sots.trud.
7 no.6:55 Je '62. (MIRA 16:2)

1. Nachal'nik otdela truda i zarabotnoy platy soveta
narodnogo khozyaystva Komi ASSR.

(Wages—Mineral industries)

(Bonus system)

621.396.671 ; 538.51 - 82		B 66 K 2223
Physicalbases of "induced e.m.f." methods. Meyerovich, L. Bull. Acad Sci., USSR -, Dep. Tech. Sci., No. 12, pp. 804-810, 1944. - On the basis of the available literature, the author discusses the method of induced e.m.f.'s as an effective technical method for calculating the power radiated by an aerial, and the radiation-resistance of the aerial or its individual conducting components.		
E. R. A.		
450.314 METALLURGICAL LITERATURE CLASSIFICATION		
SIGNATURE		
COLLECTION		

MEYEROVICH, I. A.

Section of Electrocommunication, Acad. Sci. USSR (-, -) (-)

Military Electrotechnical Red Banner Acad. Communication of the Red Army (-, -) (-)

"On the Theory of the Blocking-generator."

Iz. Ak. Nauk, SSSR, Tekhn. Nauk, No. 1, 1966

BODE, Hendrik W.; KOLOSOV, A.A., [translator], redaktor; MEYEROVICH, L.A.,
[translator], redaktor; KARASEV, M.D., redaktor; GESSEN, L.V.,
redaktor; KORNILOV, B.I., tekhnicheskiiy redaktor.

[Network analysis and feedback amplifier design] Teoriia tsapai i
proektirovaniye usilitelei s obratnoi svyaz'yu. Perevod s angliiskogo
i red. A.A.Kolosova i L.A. Meerovicha. Moskva, Gos. izd-vo inostran-
noi lit-ry, 1948. 441 p. (MLRA 8:5)

(Radio circuits) (Amplifiers, Electron-tube) (Telephone lines)

MEYEROVICH, L. A.

PA 20/49T27

USSR/Electricity
Circuits, Electric
Mathematics, Applied

Sep/Oct 48

"Synthesis of Circuits for Given Time-Character-
istics," L. A. Meyerovich, Cand Tech Sci, 6¹/₄ pp

"Radiotekh" Vol III, No 5

Gives system for synthesizing a circuit approxi-
mating a given pulse form. System consists of load
resistance and purely reactive dipole. Transitional
conductivity of reactive dipole is determined by
solving Voltaire's integral equation. Parameters
of circuit are found by approximating trigonometric
sum of transitional conductivity of dipole. Sub-
mitted 20 Apr 48.

20/49T27

MEYEROVICH, L. A.

USSR/Electronics - Frequency Characteristics Jul 52

"Computing the Time and Frequency Characteristics of Multicascade Systems," L. A. Meyerovich, G. P. Tartakovskiy

"Zhur Tekh Fiz" Vol XXII, No 7, pp 1200-1220

Author attempts to simplify complicated computations of multicascade systems by applying method of approximations. He finds the frequency characteristics of systems from the time characteristics, and the latter from characteristics of the composing cascades, on the basis of characteristic parameters.

223T43

MEYEROVICH, L.A.; ZELICHENKO, L.G.; ALEKSANDROVA, A.A., red.; URAZOVA,
A.N., tekhn. red.

[Pulse techniques] Impul'snaya tekhnika. Moskva, Izd-vo
"Sovetskoye radio," 1953. 829 p. (MIRA 16:7)
(Pulse techniques (Electronics))

MEYEROVICH, L.A.; ZELICHENKO, L.G.; ALEKSANDROVA, A.A., redaktor; KORUZEV,
N.N., tekhnicheskiiy redaktor

[Pulse techniques] Impul'snaya tekhnika. Izd. 2-e. Moskva, Izd-vo
"Sovetskoe radio," 1954. 759 p. (MLRA 8:4)
(Pulse techniques (Electronics))

MEYEROVICH, L.A., kand. tekhn.nauk; ZELICHENKO, L.G., kand. tekhn. nauk.

Calculating the turnover rate of multivibrators. Radiotekhnika 8
no.1:42-54 Ja-P '53. (MIRA 11:6)

(Pulse techniques (Electronics))

24860

S/108/61/016/009/002/002
D202/D306

9.2580

AUTHORS:

Vatin, I.M., and Meyerovich, L.A.

TITLE:

Stabilizing properties of a magnetic pulse generator

PERIODICAL: Radiotekhnika v. 16, no. 9, 46 - 54, 1971

TEXT: Although the theory of magnetic pulse generators fed from alternating sources has been studied by several workers (Ref. 3: L.A. Meyerovich, L.G. Zelichenko, Trudy, VKAS No.53, 1956) the solution of the problem of dependence of the generator pulse amplitude on e.g. the capacity of 1st condenser, has not, as yet, been given. A knowledge of it is necessary for the sake of correct assessment of the generator elements and this is what the authors derive in the present article. They assume that the generator operates in a pre-determined regime, namely in the regime with one saturation only, the characteristic of which is also given in the article. Considering the

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D202/D306

Stabilizing properties...

schematic diagram of the magnetic pulse generator as shown in Fig. 1 the problem of the formation of the voltage pulse at the capacitor C_2 is discussed for operation with one saturation state of core L_1 . It is shown that the amplitude of the pulse capacitor C_2 and the amplitude of output pulses therefore, does not depend on the amplitude of the supply voltage. It is shown subsequently that the value of C_1 , losses in C_1 , L_1 and T_{r2} determine the length τ of the pulse of the 2nd capacitor but since τ is very small as compared with the period of the driving voltage T , changing these parameters even within very wide limits would affect very little, only the pulse amplitudes. As an illustration an example of a highly stable experimental pulse generator is given and discussed. The peak pulse power was 300kW, duration of pulse 1.25 microsecond, repetition frequency 400c/s. circuit diagram as shown in Fig. 1. All results obtained show that changing the relevant generator parameters influences little, if at all, the amplitude of generated pulses.

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D202/D306

Stabilizing properties...

Changes observed at the extreme of the range are due to secondary saturations which was confirmed on a CRO. It is stated in conclusion that the analysis of processes occurring in the state with one saturation only, as confirmed by many experiments, shows high operating reliability and important design and technical advantages of a magnetic pulse generator. . A high degree of amplitude stability of generated pulses can be achieved, this amplitude being independent both of the supply voltage and of parameters of the generator itself. There are 8 figures and 3 references: 2 non-Soviet-bloc and 1 Soviet-bloc. The references to the English-language publications read as follows: W.S. Melville, PIEEE, part III, v. 98, no. 53 1951; K.J. Busch, A.D. Hasley and Carl Neitzert, BSTJ no. 34 Sept. 1955.

SUBMITTED: September 19, 1960

Card 3/4

24,2300

AUTHORS:

TITLE:

PERIODICAL:

TEXT: The equation for the oscillations is derived and its solution found for the case of asymmetric stationary oscillations with period 2 ; their stability is investigated. The asymmetric regime of stationary oscillations was chosen, as being of greater practical interest. A block diagram of the magnetic pulse-generator is shown. The processes between 2 saturations of the choke L are described by the differential equation

$$\frac{1}{b^2} \cdot \frac{d^2 u_1}{dt^2} + \frac{1}{b} \cdot \frac{du_1}{dt} + u_1 = \sin(t + \psi) - \frac{1}{2b} N. \quad (3)$$

- card 1/5

S/108/62/017/005/002/007
D407/D301

Study of stationary ...

between the (k-1)-st and k-th saturation of the choke is denoted by $u_1(k)$ and $i_1(k)$. Thereupon, a system of recursion (difference-) equations

$$\left. \begin{aligned} i_1(k+1)(0) &= i_1(k)(T_k) \\ u_1(k+1)(0) &= q_1 u_1(k)(T_k) \\ \psi_{k+1} &= \psi_k + T_k \end{aligned} \right\} \quad (7)$$

is obtained, where T_k is the time lapse between 2 consecutive saturations of the choke. Eqs. (7) are nonlinear. T_k is determined by two transcendental equations, the first of which being

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